

To: Beth Suedmeyer

Date: September 8, 2017

Project #: 12984.00

From: Tracie Lenhardt, P.E.  
Project Manager

Re: Response to 25% Design Town Comments  
Bruce Freeman Rail Trail  
Sudbury, MA

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The following is in response to comments received from the Town of Sudbury regarding the 25% Design Submission for the Bruce Freeman Rail Trail Project. Comments are shown below in regular font, with VHB responses immediately following in bold italics.

**Dan Carty (dated 7/22/17)**

From 25% Estimate

1. \$9 million estimate, we've been told \$7 million? What was TIP approved and where will balance come from?

***Response: During a meeting on March 6, 2017, MassDOT agreed with the use of boardwalk to minimize wetland resource impacts. The additional costs of the boardwalk was discussed and MassDOT stated that they would approve the additional costs.***

2. With a detailed list like this it's hard to tell what is covered and what isn't, so I'll ask this way – does this account for "best case scenario", "worst case scenario", or somewhere in between? You listed out the Peakham Road intersection and Cavicchio properties, as well as others, as outstanding. Are any of those accounted for in the \$9 million?

***Response: The current estimate represents what is shown on the plans. If MassDOT asks for additional items during their review process, then MassDOT will increase the project budget.***

3. From DRAFT HopBrook Prelim Structures Report.pdf: Section K PRELIMINARY COST ESTIMATE Based on the proposed rehabilitation detailed in this report and the new timber deck and railings, the estimated cost for the bridge work is \$440,000, which includes a 25% contingency. The detailed preliminary cost estimate is provided in Appendix D.

- a. Why is this listed in the 25% Cost Estimate document as \$216,800???

***Response: The cost for LS Item 992.1 is only a portion of the total bridge rehabilitation cost. The total cost is listed in the report, and the breakdown of the costs are provided in the appendix. Note that the final estimate of this bridge rehabilitation has changed. The total estimate for the Hop Brook rehabilitation and deck replacement work is \$340,000, broken down as follows:***

- \$218k for new deck and superstructure rehab (Item 992.1)

- **\$28k for abutment concrete and rebar (Items 901. and 910.1)**
- **\$11k for temporary shielding (Item 994.1)**
- **\$10k for existing stone masonry re-pointing (Item 690.91)**
- **\$73k contingency and rounding (added to LS Item 992.1 in 25% estimate)**

**These items are all included in the 25% Cost Estimate and combine to equal the \$340,000 included in the report. These items are in accordance with MassDOT standards.**

b. What else here has been overstated/understated and/or reported inconsistently???  
**Response: See response above.**

4. From DRAFT Type Study Report - Sudbury BFRT over Pantry Brook.pdf. This bridge is failed and the cost to replace is estimated at \$310,000 (alt 2 \$410,000), yet Hop Brook bridge (unfailed) is \$440,000 to repair? Is this even in the right ballpark?

**Response: The estimates have changed. The Hop Brook Bridge rehabilitation estimate is now \$340,000, and the Pantry Brook Bridge replacement is \$350,000. The Hop Brook is a larger crossing than the Pantry Brook. The cost per square foot for the Hop Brook Bridge rehabilitation is \$620/sf, while the cost per square foot of the Pantry Brook Bridge replacement is \$720/sf. The breakdowns of the cost estimates are provided in the appendices of the respective reports.**

- a. Why does 25% cost estimate document have all work for this bridge (S-31-013) totaling out at \$137,683

**Response: Note that the numbers in the final report and estimate documents are slightly different from the draft documents referred to above. Using the final numbers, the total estimate for the Pantry Brook bridge replacement work is \$350,000, broken down as follows:**

- **\$160k for the fabrication/delivery/installation of the new bridge and walls (Item 995.01)**
- **\$54k for removing/resetting portions of the existing stone masonry abutments (Items 690.91, 690.92, and 690.93)**
- **\$26k for excavation and fills (Items 140., 151.1, 151.2, and 983.1)**
- **\$20k for control of water (Item 991.)**
- **\$17k for demolition and removal of existing bridge (Item 115.1)**
- **\$73k contingency and rounding (added to LS Item 995.01)**

**These items are all included in the 25% Cost Estimate and combine to equal the \$350,000 included in the report. These items are in accordance with MassDOT standards.**

b. Which is right/more accurate?  
**Response: See response above.**

c. Why is it reported inconsistently?

**Response: See response above.**

d. Cost of bridge demolition cost inconsistent between documents

**Response: The estimate for demolition of this bridge is \$16,800 in both the final 25% Estimate and the Type Study Report documents (not including any contingency, which is applied to the total bridge cost estimate).**

5. [From 25MassDOT Review checklist.pdf](#)

a. 3.03 – is this the only intersection where this is the case? While not a formal intersection would we have the same concern behind Method Machine, for example?

**Response: Yes. The question relates to the design speed of the users of the path.**

b. 10.02 – Is \$15million a threshold to trigger a 'bottoms up' estimate? I assume it is...

**Response: \$15 million is the initial trigger for a 'bottoms-up' estimate. Since this project is above \$6 million, though, the State Highway Division can require a Bottoms-up estimate be performed if they determine the project to be complex.**

6. [12984FDR-DRAFT.pdf](#)

a. No traffic volume info for 71 Union, Fairview Farm, or Codger Lane?

i. Codger was considered in Section 4 Traffic Management Strategy, though...

**Response: Daily traffic volumes were not collected for the privately-owned driveways. Peak hour counts were collected at Codger Lane and Union Avenue because higher volumes were anticipated for potentially meeting pedestrian hybrid beacon warrants.**

b. No consideration of traffic entering and exiting shopping plaza near Peakham? It's as close to the trail as Ti Sales or Peakham itself and comes into play significantly

**Response: The Traffic Impact and Access Study for [The Village at Sudbury Station 40B Development](#)<sup>1</sup> report minor peak hour traffic volumes for this driveway. The plaza driveway was not included in the original counts as it is an "exit only" and all drivers would be looking left for gaps in traffic, putting trail users within their line of sight. If the Town wishes to pursue full signalization of Peakham Road, additional traffic counts will be required for signal warrant analysis and the plaza driveway could be included in that evaluation.**

c. Pg 26 Morse Road "At the crossings with lower volumes and adequate stopping sight distance, crosswalk markings, signs, advanced signs and pavement markings are proposed. This treatment is proposed at Morse Road." The BFRT committee stressed this intersection as particularly tricky – cars come down the hill and around the bend from the

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<sup>1</sup> Traffic Impact and Access Study, *The Village at Sudbury Station 40B Development*, Hudson Road, Sudbury, Massachusetts, MDM Transportation Consultants, Inc., December 2015.

horse farm, we had recommended markings earlier up the hill. I did not see those mentioned here.

**Response: Designer does not recommend additional or adjusting the location of the currently proposed warning devices as they are properly located for the crossing location and site-specific needs. If the Town is concerned with the speed of vehicles coming around the corner, a driver feedback sign could be installed with the speed limit sign to draw attention to speeds.**

7. BFRT-25-PLANS.pdf

- a. I expected the crossing at Pantry Brook to be more hairpin-like? In the BFRT Task Force we said this would be the trickiest crossing on the whole path. I recall a lengthy conversation with Chief Miles regarding what he could and couldn't navigate, would there be a gate, would the ambulance be able to navigate around it, etc. I assume this is all accounted for?

**Response: A truck template for the ambulance was developed from the information provided by Chief Miles and was used to create the crossing shown on the plans. At the 75% Design Stage, the gateways will be further designed and the crossing may need to be adjusted at that time.**

8. 25% Design Submission Checklist Early Environmental Coordination for Design Projects

- a. Dated 1/20/16 – assume it's too late to comment in this now?
  - i. Updates made after this though...is that date correct?

**Response: This date references the issue date for the EEC form, not the submittal date of the form.**

- ii. Is the MEPA threshold document available for review?

**Response: The MEPA threshold document is attached to the Early Environmental Checklist. The ENF is prepared after MassDOT accepts the 25% Design.**

9. DRAFT HopBrook Prelim Structures Report.pdf

- a. Pg 3 "HB is working with the City to finalize the design of the bridge." Should be Town, not city

**Response: This has been updated to "Town."**

- b. Section K PRELIMINARY COST ESTIMATE Based on the proposed rehabilitation detailed in this report and the new timber deck and railings, the estimated cost for the bridge work is \$440,000, which includes a 25% contingency. The detailed preliminary cost estimate is provided in Appendix D.

- i. Why is this listed in the 25% Cost Estimate document as \$216,800???

**Response: See response to Comment #3 above.**

- ii. Which is right/more accurate?

**Response: See response to Comment #3 above.**

- iii. Why is it reported inconsistently?

**Response: See response to Comment #3 above.**

10. DRAFT Type Study Report - Sudbury BFRT over Pantry Brook.pdf

- a. This bridge is failed and the cost is estimated at \$310,000 (alt 2 \$410,000), yet Hop Brook bridge (unfailed) is \$440,000? Is this even in the right ballpark?

**Response: See response to Comment #4 above.**

- i. Why does 25% cost estimate document have all work for this bridge (S-31-013) totaling out at \$137,683

**Response: See response to Comment #4 above.**

- ii. Which is right/more accurate?

**Response: See response to Comment #4 above.**

- iii. Why is it reported inconsistently?

**Response: See response to Comment #4 above.**

- iv. Cost of bridge demolition cost inconsistent between documents

**Response: See response to Comment #4 above.**

11. Sudbury BFRT Parking 02.pdf

- a. "There is also an old tennis court area at Upper Featherland that is available for overflow parking." *NO – recently approved at Town Meeting for rehabilitation. This needs to be removed from multiple locations in the document. We can't say that this space will be available for parking when now I will not be.*

**Response: The references to the tennis court area have been removed.**

- b. "The Davis Farm parking was lightly used. There was never more than a single car observed parked there." - misleading. The sentence before states that it was heavily used. On weekends in the spring and fall that lot is over capacity for Sudbury youth soccer.

**Response: Davis Farm is a conservation area adjacent to the Davis Field site. Davis Farm is a separate property, with separate access and separate parking (a 4-5 space parking lot). The text will be clarified to avoid the confusion**

- c. Sudbury Town Square retail property – it would be interesting to see what the property owner would say to us advocating their property be used as parking. I'm not sure they

have weighed in on this? I see Ti Sales field as a perfect parking and launching spot for this project, it will eliminate foot/bike/car traffic at the Peakham road intersection if we use that rather than the private property in the shopping plaza...plus the Town already owns it

**Response: The Town has indicated that they will explore the possibility of using the Town Square retail parking if needed. It would not be used unless an agreement has been established with the owners.**

**John Drobinski (dated 7/24/17)**

12. Traffic study states Sudbury "owns" North Rd, I thought the State had control. Not an issue just wondering.

**Response: While North Road is a state-numbered route, it is owned and maintained by the Town.**

13. Also noticed mitigation at Cavcihico(sic) but is mitigation/screening proposed elsewhere ?

**Response: Fencing along the property line is shown on the 25% Design Plans. During the next design stage, coordination with Mr Cavicchio will occur and any plantings or other screen methods can be added to the project at the 75% Design Stage. Some other fencing and screening has been proposed at other locations where engagement with the landowner has occurred to determine what they prefer. Additional screening and the full landscape plan will be presented at the 75% design stage.**

**Pat Brown – Wetlands (Dated 7/25/17)**

14. I've been looking at the BruceFreeman-EECC.pdf document, which includes the discussion of vernal pools.

On June 30, 2008, Atlantic Engineering & Survey Consultants submitted to the Town of Sudbury the "Sudbury Bruce Freeman Rail Trail Existing Conditions Base Survey", which mentions (Note #4 on page 1 of 23) that wetlands flags demarcating wetland resource areas were delineated March through May of 2008 by: Wetlands & Land Management Inc. Danvers, Massachusetts. Pages 1 through 12 of this plan was submitted as part of the Bruce Freeman-EECC document, and VHB used them as the basis for the vernal pool investigation completed in May 2015 (Page 4 of the BruceFreeman-EECC.pdf, "Regulatory Framework and Required Deliverables", item #9.

VHB states that a vernal pool investigation was completed in May 2015. From reading further, this inspection was based upon visual examination of the potential pools identified in 2008 by Atlantic Engineering/Wetlands & Land Management. I do not know whether the 2008 identification would still be considered usable; I've CC'ed the Conservation Coordinator on this e-mail because she would know better.

From the November 7, 2016, Conservation Commission Minutes here:

D. Henkels motioned “to approve the wetland delineation as shown on the revised plans entitled: MA DOT Plan of Topographic Survey of Proposed Bike Path in the Town of Sudbury as ordered by MA DOT Highway Division, dated May 19, 2016 and revised on or about Oct. 24, 2016 subject to:

1. receipt of dated revised plans which are duplicates of the plans emailed to the Commission Oct. 24, 2016; and 2. recognition that the ORAD is only a partial ORAD and does not include the identification of all perennial streams or vernal pools, and that a request for an amended ORAD will be submitted to the Conservation Commission once site conditions permit the identification of these additional resource areas.”

Motion seconded by C. Russo.

Motion voted unanimously in favor.

B. Suedmeyer stated that the town realizes the ORAD findings are incomplete and subject to later revisions.

The Atlantic Engineering plans caught my attention for historical reasons. However, I don't understand how the observations made nine years ago by a contractor we dismissed can still be considered valid without further field work to determine where potential vernal pools are -- now--.

**Response from Beth Suedmeyer:** *2015 and 2017 vernal pool studies were performed. The 2015 report was included in the 25% package, but we are still waiting to receive the 2017 one. No study was done in 2016 because of the drought conditions. The studies have been performed in locations where and when Debbie has determined they should be conducted. It is my understanding that she was instrumental in identifying the locations of the Atlantic Engineering Survey work.*

*The perennial stream confirmations and likely additional vernal pool study will still need to occur. If this isn't discussed in the communications prepared for MassDOT, we'll likely want to revise them so that this is understood. We have time for the additional resource area delineation to be identified and submitted for review/approval by Con Com, as we do not anticipate submitting the NOI for approximately a year. I assure you we will have close coordination with Debbie and the Commission as we advance this work and develop the scope of work for the 75% design phase.*

15. I clearly don't understand the process. Why don't we (Conservation Commission and/or their peer reviewer? Planning Department as project manager? Town Manager as procurement officer?) have the 2017 vernal pool/intermittent stream report if it was done? What does "done" even mean if the information has not been received, let alone reviewed? What is the point of submitting these forms to MassDOT when parts appear to be incomplete and/or incorrect? Previously, the reasoning has been that submissions need to be made prior to formal project milestones to get the project on the TIP. The project is now on the TIP, so we have the opportunity to supply the rigor normally observed in the 25% design process. When the Selectmen approved the project plans on March 21 and April 4, it was certainly, my understanding that the 25% design documents would be complete and accurate as submitted, even though this was not explicitly stated.

Is this submission to MassDOT the contractor's (VHB) submission on its own behalf, or a submission on behalf of the Town of Sudbury? If the Town is responsible for the project and for the project submissions, then it is the Town's job to verify the information we provide. If it's the contractor's submission, then at least the project manager should have reviewed the documents

and items like this should have been addressed. I am specifically concerned that the town will be considered to have accepted the contractor's unreviewed representations. Given the intense public scrutiny facing this project, it is particularly important that the town be meticulous and accurate in its public representations and its observance of prescribed process.

The MassDOT EECC (Early Environmental Coordination Checklist) is clearly a checklist. It indicates that item #9 is Addressed. The fine print discussion does not mention anything about a 2017 vernal pool/intermittent stream delineation, although this is clearly discussed at the November 7 ConCom meeting as I have described. At a minimum, the EECC document should be updated to describe the state of permitting accurately.

**Response from Beth Suedmeyer:** *The 2017 vernal pool study was done (field work and data capture completed), the report has not been sent to us yet. There is an understanding that the vernal pool and perennial stream determination is pending further investigation. As I stated we will make sure this is more clearly spelled out. I do not think the lack of the vernal pool study or final delineation of vernal pools and streams warrants concern for the 25% design. We have a good sense of likely outcomes given the data at hand and are for the most part assuming the resources exist.*

*The 25% documents are being reviewed by town staff and committees and their/our comments, questions, and concerns will be addressed by the design team. There is no intent to submit incomplete or inaccurate information to MassDOT. The submission will be sent by the contractor on the Town's behalf. It will be well reviewed and vetted. The edits to the EECC and others will occur.*

**VHB Response:** *The 2017 vernal pool study field work was conducted on April 20 and 21, 2017 and the report was completed on August 8, 2017. MassDOT provided the Town of Sudbury a copy of the study. The vernal pool study(ies) and stream determination will be a continuous effort in concert with the Conservation Commission over a few seasons and when enough data is collected, the ORAD will be amended. The 25% Design submission makes educated assumptions about the existing resources that may need to be adjusted as data is collected and as the next design stages occur. The minor edits to the EECC will be completed prior to the 25% submission to MassDOT.*

**Pat Brown – Parking Study (dated 7/19/17)**

16. The discussion of parking at Ti-Sales omits any discussion of the difficulty of access by car to/from the parking area. As you know this is problematic. The list of outstanding items includes "Possible traffic signal at Peakham Rd"--if there is any serious consideration of directing trail users to the Ti-Sales parking area, the intersection plan will have to accommodate cars entering and leaving the parking area.

**Response:** *The FDR discusses the potential of providing a traffic signal at Peakham Road.*

17. Page 3 indicates that "an old tennis court area at Upper Featherland that is available for overflow parking." I believe this refers to the Featherland Tennis Courts. Funding to reconstruct the courts was appropriated by 2017 Annual Town Meeting (Article 29), which passed by "Well More Than A Majority." These courts will not be available for overflow parking at Featherland. Has VHB not



been informed of this? Please remove this reference, and later references to using the court areas for parking, from the document.

**Response: The references to the tennis court area have been removed.**

18. The discussion of "Other Potential BFRT Parking Locations" (Page 5) states that "one of the designated parking areas for the Assabet River Rail Trail in Hudson is located in a retail plaza parking area." The memo does not describe the tenants of the plaza, the number of spaces dedicated to the rail trail, the fraction of the parking lot dedicated to the rail trail, or the agreement with the plaza owners or tenants concerning parking. All of this would be useful information. At a bare minimum, the specific plaza (name and address) and the number of spaces under discussion should be identified in the memo. Have merchants in the Sudbury Town Square retail plaza been approached about providing parking, and how closely does their situation approximate that in Hudson?

**Response: The plaza is referenced as "157 Washington Street" in Table 4 of the appendix. There are 66 spaces for the businesses and 15 for trail users. The Hudson retail plaza is occupied by a dry cleaners, a gym, and an auto parts store. The memo has been updated with the information.**

**We don't know if the town has talked to the merchants (or owner) about formally providing parking at Sudbury Town Square. It is simply noted that the location is very convenient to the trail and desirable to trail users, that the plaza appears to have excess parking available, and that some merchants may wish to market to rail trail users.**

19. Since the BFRT was awarded 4 points for "Improves intermodal accommodations/connections to transit" out of a possible 6 points during evaluation by the MPO, the parking evaluation should include an estimate of commuter demand for trail parking facilities in Sudbury. This is missing entirely.

**Response: Trails don't tend to generate commuter parking activity, rather, they provide local residents car-free access to transit connections via biking or walking.**

**Charlie Russo (dated 7/27/17)**

20. Maybe I missed it, but I didn't see a line item for an environmental monitor in the "25 Percent Estimate" cost listings. I think it would be wise to include that as a line item.

**Response: An item for an Environmental Monitor has been added to the Construction Cost Estimate.**

21. I also saw that one of the recommended design alternatives is galvanized steel arch bridge, and I think SuASCo took issue with some galvanized fencing in the Concord sections. Dunno if SuASCo will be involved in the Sudbury section - I hope and expect they will - but a well prepared planner/engineer would probably want to be able to defend that design recommendation against questions about zinc leaching from galvanized steel into Pantry Brook. Or be ready with an alternative design.

**Response: Our fabricator has talked to the technical director of the American Galvanizers Association about this topic. For this type of large-diameter structure it is highly unlikely to even get measurable amounts of zinc into the water. We have attached two documents on zinc in water and zinc in soil for reference.**

**Beth Suedmeyer (dated 8/16/17)**

22. Bridge Type Study Pantry Brook

- a. There was no discussion of the stream crossing standards which I think is warranted. I'd like Alt. 2 to be the preferred, since there aren't that many differences identified between the 2 and this option would give us a greater span with natural banks for wildlife use and the design would be able to better mimic the existing bridge.

***Response: Both Alt. 1 and Alt. 2 have level crossings on top of the granite blocks to remain (approx. 3ft-5ft wide) as well as slopes, which allow for wildlife crossing below the bridge. The approximate dimensions of the wildlife accommodations for each alternative have been added to the revised report drawings. Note also that Alt. 2 requires larger equipment to construct and costs an estimated \$70,000 (20%) greater than Alt. 1, which are among the reasons why it is not the preferred alternative.***

- b. Address cost estimate concerns / inconsistencies brought up by others

***Response: See response to Comments #3 and #4 above.***

23. EECC

- c. Question 2, what was the state funding in 2015 (line 2-3)? Also typo in line 5 there is an extra "party"

***Response: The state funding reference has been removed. The typo has been corrected.***

- d. Question 3, mention SHDC response letter

***Response: A letter from the SHDC was received and has been referenced in the response to Question 3.***

- e. Why was a CE not prepared? Even if automatic, the CE should be prepared, no? This is one of those instances where a RT may not be automatically excluded because of the significance of env. Impacts and public scrutiny.

***Response: A Categorical Exclusion Checklist was not prepared at the 25% design phase because the Federal Highway Administration (FHWA) now requires comments from the 25% Design Public hearing be incorporated into the Checklist. Accordingly, the MassDOT requires the CE Checklist be prepared and submitted after the 25% Design Public hearing and before or with submission of the 75% submission package. Therefore, the CE Checklist cannot be prepared until after MassDOT approves the 25% submission and holds a public hearing.***

- f. Table of public meetings should include April 11, 2017 BOS meeting.

***Response: Reference to the April 4, 2017 BOS meeting has been added.***

- g. Question 9,
- i. more clearly note that the ORAD needs to be amended to delineate CVP/PVP and intermittent/perennial streams.

**Response: The response has been updated to include the 2017 vernal pool study.**

- ii. Also add mention of and attach the 2017 vernal pool study. In #9 I suggest adding a summary discussion of whether the 2015 and 2017 studies were consistent and what the findings are.

**Response: A summary of the results of the 2015 and 2017 vernal pool studies has been added.**

- iii. won't the Pantry Brook Bridge also require ch. 91 consideration

**Response: Pantry Brook is too small to be "navigable" under state Chapter 91 jurisdiction. The waterway needs to be navigable during any season by a "canoe, kayak, raft or rowboat".**

- h. Question 11

- i. The pri / est hab maps changed on August 1 and there is a significant decrease in the pri hab area along the corridor. I think we should update this section and the map (fig 3) accordingly. We could still mention the previous mapped areas.

**Response: The boundaries of the new estimated and priority habitat polygons have been analyzed and the resource areas are no longer present along the path. The prior limits have been removed.**

- ii. add the summary of the 2 vernal pool studies findings. How many PVP? How many CVP and SVP? Consistency in both studies?

**Response: The vernal pool studies from 2015 and 2017 have been referenced.**

- i. List of attachments (p.8) has an extra HDC response listed

**Response: The additional sheets have been removed.**

- j. MEPA: have you double checked threshold for half acre or more of other wetlands?

**Response: The impact to Riverfront Area will exceed ½ acre for the Project and exceeds the MEPA threshold for "other wetlands". The MEPA checklist and Early Environmental checklist have been updated.**

24. FDR

- k. Change subtitle (for location) to MBTA Right of Way, rather than Mass Central Rail Trail to Concord Town Line

**Response: The subtitle has been changed to "Station Road to Concord Town Line" to be consistent with MassDOT's nomenclature for the project.**

- l. Table 1-1 Codjer jurisdiction should be private

**Response: Jurisdiction of Codjer Lane has been changed to private.**

- m. Table 2-6 Typo in column heading between or west?  
**Response: Heading has been changed to "east of Peakham Road"**

25. Plans

- n. Sta129+, sheet 11 call out BLSF needed both sides of SUP  
**Response: BLSF call outs have been added.**
- o. Sta 143+, sheet 12 call out prop. swale and maybe add symbol to general symbols key  
**Response: Begin Swale call out is present at Station 143+29 RT. The swale symbol has been added to the legend.**
- p. Why is swale proposed in this section sta143-152 an other locations? But not others? When is site appropriate for this?  
**Response: Swales are proposed in locations where water from backslopes would travel over the path if a swale was not present. The swale conveys the water alongside the path until the water can flow away from the path.**
- q. Sheet 15 note boardwalk throughout section  
**Response: Prop 14' Boardwalk note is present at Station 170+60 LT.**
- r. Change limits of pri hab resource areas throughout plans, per Aug. 1 update from NHESP  
**Response: The boundaries of the new estimated and priority habitat polygons have been analyzed and the resource areas are no longer present along the path. The prior limits have been removed.**
- s. Sta 244+84 culvert? No info  
**Response: There is a path that has been constructed to cross the railroad in this location. A culvert was built to convey water underneath this path about 50' off of the proposed path. No accommodations have been made to maintain this path crossing under the current design.**
- t. Sta 257+~60 what is happening here with headwall and pipe? DIP? Not in abbrev. key  
**Response: There is a low point off the right side of the path at this location. Instead of allowing water to pool, the headwall and Ductile Iron Pipe (DIP) will allow water to flow under the path to the adjacent wetland. DIP is in the utility abbreviations on sheet 2.**
- u. Sta 273+ is there a culvert where the bank flags are?  
**Response: The Bank flagging in the vicinity of Station 273+ reflect the Banks of Hop Brook. There is not culvert in this are other than the bridge that spans over Hop Brook at Station 272+00.**

- v. Sta 313+50 culvert blocked and buried / under water – any recommended action?  
**Response: Further analysis should be completed prior to 75% design to determine what unblocking this culvert would do to both upstream and downstream waterways.**
  
- 26. Prelim Structures Report Hop Brook
  - w. Location map does not have bridge number  
**Response: Bridge number is included on the Location Map.**
  
  - x. Address cost estimate concerns / inconsistencies brought up by others  
**Response: See responses above.**
  
- 27. Estimate
  - y. Should Env. Monitor cost be considered at this time? We know Con Com will require it through construction duration  
**Response: An item for an Environmental Monitor has been added to the Construction Cost Estimate.**
  
  - z. Address cost estimate concerns / inconsistencies brought up by others  
**Response: See above responses.**

**Unofficial Charlie Russo (dated 8/14/17)**

- 28. Overall Recommendations
  - aa. Recommend adding a wetland-qualified environmental monitor who reports to ConCom as part of 25% design budget estimate, as was done in northern sections of BFRT  
**Response: An item for an Environmental Monitor has been added to the Construction Cost Estimate.**
  
  - bb. Recommend design engineer review the OOCs and SOOCs of the BFRT sections in Acton and Concord, as these provide a guide for Sudbury ConCom decisions  
**Response: The OOCs and SOOCs for the Acton and Concord sections of the BFRT will be reviewed.**
  
  - cc. Recommend design engineer review Sudbury's standard OOC to assist in design (e.g., in one of the northern stretches of BFRT, GPI proposed non-native plantings; reviewing Sudbury standard OOC could avoid need for that kind of design revision)  
**Response: The plant list at this time is just a place holder for estimating purposes. The planting schedule will be revised at the 75% Design Stage to ensure Non-native plants are not used in the landscaping designs.**
  
  - dd. Not sure green vase zelkova is on Sudbury native plant list

**Response: The plant list at this time is just a place holder for estimating purposes. The planting will be further designed at the 75% Design Stage.**

29. Questions

- ee. Fencing and grading widens significantly around Cavicchio?

**Response: Discussions with Cavicchio about the path location through this property are ongoing. The design currently shown proposes fencing 1 foot in from the MBTA ROW in accordance with their standard practices.**

- ff. Width of shoulder – e.g., some sections of 3 ft shoulder near Hop Brook, and then later 2 ft. This due to grading, as shown in cross sections? In some places throughout, 3 ft. shoulder seems wide.

**Response: There is a 2' shoulder present throughout the project. Where railing is proposed, the shoulder slope is extended by 1' to allow for the railing to be installed while maintaining a 2' shoulder.**

- gg. Bump out south of Hop Brook – room for an overlook?

**Response: There is potential for an overlook area in this location. This can be further explored at the 75% Design Stage.**

- hh. 3-ft shoulder in Priority habitat resource area around stations 183-190 – can this be narrowed?

**Response: The Priority habitat resource areas were updated in August of 2017. The project is no longer within any Priority habitat resource areas.**

- ii. Didn't see fencing in priority habitat resource area around stations 183-185. Is fencing desirable here?

**Response: Use of fencing is generally discouraged by MassDEP because of the impact on wildlife movement. When it is required for other reasons, it must be elevated 6 inches off the ground to allow small animals to pass under. Fencing in a priority habitat area would be counter productive to wildlife habitat functions. Also, the Priority habitat resource areas were updated in August of 2017. The project is no longer within any Priority habitat resource areas.**

- jj. Retaining wall at Pantry Brook -questions about how this will affect habitat value, etc. Is my read correct that station 285 +00 is an 8-foot retaining wall?

**Response: There is no retaining wall proposed at the Pantry Brook crossing at this time. The retaining wall proposed at Sta 285+00 will have an exposed face of approximately 4' and a buried depth of approximately 4' to help provide a safe crossing for path users on side of Pantry Road. This wall will be approximately 60 feet long and wildlife will easily be able to negotiate around the wall if they cannot go over the wall. The wall will not reduce habitat value in the vicinity of Pantry Road.**

kk. Other sections of retaining wall – why, what purpose, what effect?

**Response: There is retaining wall proposed around Pantry Road to provide a safe path crossing. The path needs to jog out to provide a safe crossing angle for path users at Pantry Rd. The slopes on either side of the road are fairly steep, and both sides of the road have Wetlands at the bottom of the slope. The retaining walls help avoid the need to chase slopes and impact wetlands.**

**The purpose of the retaining walls on either side of the path from Sta 294+65 to 305+05 is to help mitigate the permanent impacts to the Wetlands on either side of the path. The walls tighten the path footprint, minimizing the permanent wetland impacts in the area.**

ll. Not much room for a rest stop at Peakham and Hudson

**Response: Agreed. During the 75% design submission further evaluation should be done to determine gateways, rest stops, lookout areas, etc.**

mm. Isn't there a stream crossing somewhere south of Peakham, maybe around station 169?

**Response: There is a stream crossing that has washed out the railroad at station 167+25. This stream will be maintained and flow underneath the proposed boardwalk.**

nn. Greatest wetland impacts are stations 284-305 and this is a retaining wall section?

**Response: The purpose of the retaining walls on either side of the path from Sta 294+65 to 305+05 is to help mitigate the permanent impacts to the Wetlands on either side of the path. The walls tighten the path footprint, minimizing the permanent wetland impacts in the area.**

oo. Appears there is one boardwalk section (south of Peakham), and one MSE/retaining wall section, between Pantry Brook and 117?

**Response: This is correct. There is also retaining wall proposed on both sides of Pantry Road.**